

**THE CLAIMED INVENTION IS:**

1. An electrosurgical device comprising:
  - (a) a main body having a proximal end and a distal end;
  - (b) a heat delivery modality situated and arranged at the distal end of the main body; the heat delivery modality for providing thermal energy to a tissue being treated; and
  - (c) a sensor arrangement situated and arranged at the distal end of the main body; the sensor arrangement being configured to engage and detect shrinkage of the tissue being treated.
2. The electrosurgical device according to claim 1, wherein the heat delivery modality is configured to provide a continuous flow of electrically conductive fluid to the tissue being treated while thermal energy is introduced.
3. The electrosurgical device according to claim 1, wherein the sensor arrangement comprises:
  - (a) at least one contact sensor situated and arranged at the distal end of the main body; the at least one contact sensor being constructed and arranged to engage and detect the shrinkage of the tissue being treated.
4. The electrosurgical device according to claim 1, wherein the sensor arrangement comprises:
  - (a) first and second clamping members being situated astride the main body;
    - (i) the first clamping member including a first end pivotably connected at the main body and a second end opposite the first end; and
    - (ii) the second clamping member including a first end pivotably connected at the main body and a second end opposite the first end;

(A) each of the second ends of the first and second clamping members being constructed and arranged to engage and detect shrinkage of the tissue being treated such that the first and second clamping members rotate inwardly with respect to one another.

5. The electrosurgical device according to claim 4, wherein:

- (a) the first clamping member includes a first mechanical stop for limiting the rotation of the first clamping member; and
- (b) the second clamping member includes a second mechanical stop for limiting the rotation of the second clamping member;
  - (i) the first and second mechanical stops being configured to limit the rotation of the first and second clamping members when the tissue being treated achieves a pre-determined shrinkage level.

6. The electrosurgical device according to claim 4, wherein:

- (a) the first clamping member includes a first jaw and a second jaw at the second end of the first clamping member; the first and second jaws of the first clamping member being selectively adjustable to grasp the tissue being treated; and
- (b) the second clamping member includes a first jaw and a second jaw at the second end of the second clamping member; the first and second jaws of the second clamping member being selectively adjustable to grasp the tissue being treated.

7. The electrosurgical device according to claim 6, wherein:
  - (a) each of the first and second jaws of the first clamping member includes a textured inner surface for resistively contacting the tissue being treated; and
  - (b) each of the first and second jaws of the second clamping member includes a textured inner surface for resistively contacting the tissue being treated.
8. The electrosurgical device according to claim 7, wherein:
  - (a) each of the first and second jaws of the first clamping member includes a solution delivery channel for delivery of a conductive solution to the tissue being treated; and
  - (b) each of the first and second jaws of the second clamping member includes a solution delivery channel for delivery of a conductive solution to the tissue being treated.
9. The electrosurgical device according to claim 4, wherein the heat delivery modality includes:
  - (a) a first electrode arrangement operable with the first clamping member; the first electrode arrangement being coupled to a source of radio frequency energy; and
  - (b) a second electrode arrangement operable with the second clamping member; the second electrode arrangement being coupled to the source of radio frequency energy.
10. The electrosurgical device according to claim 9, wherein:
  - (a) the first electrode arrangement includes at least one wet electrode being coupled to the source of radio frequency energy; and
  - (b) the second electrode arrangement includes at least one wet electrode being coupled to the source of radio frequency energy.

11. The electrosurgical device according to claim 1, wherein the heat delivery modality includes a laser configured to provide thermal energy to the tissue being treated.
12. The electrosurgical device according to claim 4 further comprising:
  - (a) a forceps extending from the distal end of the main body between the first and second clamping members; the forceps including a first arm and a second arm; the first and second arms being selectively adjustable to slidably receive the tissue being treated.
13. The electrosurgical device according to claim 12, wherein the heat delivery modality includes:
  - (a) a first electrode disposed at the first arm of the forceps; the first electrode being coupled to a source of radio frequency energy; and
  - (b) a second electrode disposed at the second arm of the forceps; the second electrode being coupled to a source of radio frequency energy.
14. The electrosurgical device according to claim 13,
  - (a) the first electrode includes a wet electrode; and
  - (b) the second electrode includes a wet electrode.
15. The electrosurgical device according to claim 12, wherein:
  - (a) the first clamping member includes a first jaw and a second jaw at the second end of the first clamping member; the first and second jaws of the first clamping member being selectively adjustable to grasp the tissue being treated; and
  - (b) the second clamping member includes a first jaw and a second jaw at the second end of the second clamping member; the first and second jaws of the second clamping member being selectively adjustable to grasp the tissue being treated.

16. The electrosurgical device according to claim 15, wherein:
- (a) each of the first and second jaws of the first clamping member includes a textured inner surface for resistively contacting the tissue being treated; and
  - (b) each of the first and second jaws of the second clamping member includes a textured inner surface for resistively contacting the tissue being treated.
17. The electrosurgical device according to claim 12, wherein:
- (a) the first arm of the forceps includes a first solution delivery channel for delivery of a conductive solution to the tissue being treated; and
  - (b) the second arm of the forceps includes a second solution delivery channel for delivery of a conductive solution to the tissue being treated.
18. The electrosurgical device according to claim 1, the sensor arrangement further being configured to provide input to the heat delivery modality such that the thermal energy being provided by the heat delivery modality is varied according to the shrinkage of the tissue being treated.
19. The electrosurgical device according to claim 1, wherein the thermal energy provided by the heat delivery modality is minimized when the tissue being treated achieves a pre-determined shrinkage level.
20. The electrosurgical device according to claim 1, wherein the sensor arrangement is operably connected to a displacement measurement device for measuring the change in shrinkage of the tissue being treated.
21. The electrosurgical device according to claim 20, wherein the displacement measurement device is a linear potentiometer.

22. The electrosurgical device according to claim 20, wherein the displacement measurement device is an optical sensor.
23. The electrosurgical device according to claim 20, wherein the displacement measurement device is a spring/force sensor.
24. An electrosurgical device comprising:
- (a) a main body having a proximal end and a distal end;
  - (b) a heat delivery modality situated and arranged at the distal end of the main body; the heat delivery modality for providing thermal energy to a tissue being treated; the heat delivery modality being configured to provide a continuous flow of electrically conductive fluid to the tissue being treated while thermal energy is introduced; and
  - (c) a sensor arrangement situated and arranged at the distal end of the main body; the sensor arrangement being configured to engage and detect shrinkage of the tissue being treated; the sensor arrangement comprising first and second clamping members being situated astride the main body;
    - (i) the first clamping member including a first end pivotably connected at the main body and a second end opposite the first end; and
    - (ii) the second clamping member including a first end pivotably connected at the main body and a second end opposite the first end;
      - (A) each of the second ends of the first and second clamping members being constructed and arranged to engage and detect shrinkage of the tissue being treated such that the first and second clamping members rotate inwardly with respect to one another.

25. The electrosurgical device according to claim 24, wherein:
- (a) the first clamping member includes a first jaw and a second jaw at the second end of the first clamping member; the first and second jaws of the first clamping member being selectively adjustable to grasp the tissue being treated; and
  - (b) the second clamping member includes a first jaw and a second jaw at the second end of the second clamping member; the first and second jaws of the second clamping member being selectively adjustable to grasp the tissue being treated.
26. The electrosurgical device according to claim 25, wherein:
- (a) each of the first and second jaws of the first clamping member includes a textured inner surface for resistively contacting the tissue being treated; and
  - (b) each of the first and second jaws of the second clamping member includes a textured inner surface for resistively contacting the tissue being treated.
27. The electrosurgical device according to claim 25, wherein:
- (a) each of the first and second jaws of the first clamping member includes a solution delivery channel for delivery of the conductive solution to the tissue being treated; and
  - (b) each of the first and second jaws of the second clamping member includes a solution delivery channel for delivery of the conductive solution to the tissue being treated.
28. The electrosurgical device according to claim 24, wherein the heat delivery modality includes:
- (a) a first electrode arrangement operable with the first clamping member; the first electrode arrangement being coupled to a source of radio frequency energy; and

- (b) a second electrode arrangement operable with the second clamping member; the second electrode arrangement being coupled to the source of radio frequency energy.
- 29. The electrosurgical device according to claim 28, wherein:
  - (a) the first electrode arrangement includes at least one wet electrode being coupled to the source of radio frequency energy; and
  - (b) the second electrode arrangement includes at least one wet electrode being coupled to the source of radio frequency energy.
- 30. The electrosurgical device according to claim 24 further comprising:
  - (a) a forceps extending from the distal end of the main body between the first and second clamping members; the forceps including a first arm and a second arm; the first and second arms being selectively adjustable to slidably receive the tissue being treated.
- 31. The electrosurgical device according to claim 30, wherein the heat delivery modality includes:
  - (a) a first wet electrode disposed at the first arm of the forceps; the first wet electrode being coupled to a source of radio frequency energy; and
  - (b) a second wet electrode disposed at the second arm of the forceps; the second wet electrode being coupled to a source of radio frequency energy.
- 32. The electrosurgical device according to claim 30, wherein:
  - (a) the first clamping member includes a first jaw and a second jaw at the second end of the first clamping member; the first and second jaws of the first clamping member being selectively adjustable to grasp the tissue being treated; and



- (b) the second clamping member includes a first jaw and a second jaw at the second end of the second clamping member; the first and second jaws of the second clamping member being selectively adjustable to grasp the tissue being treated.
- 33. The electrosurgical device according to claim 32, wherein:
  - (a) each of the first and second jaws of the first clamping member includes a textured inner surface for resistively contacting the tissue being treated; and
  - (b) each of the first and second jaws of the second clamping member includes a textured inner surface for resistively contacting the tissue being treated.
- 34. The electrosurgical device according to claim 30, wherein:
  - (a) the first arm of the forceps includes a first solution delivery channel for delivery of a conductive solution to the tissue being treated; and
  - (b) the second arm of the forceps includes a second solution delivery channel for delivery of a conductive solution to the tissue being treated.
- 35. The electrosurgical device according to claim 24, the sensor arrangement further being configured to provide input to the heat delivery modality such that the thermal energy being provided by the heat delivery modality is varied according to the shrinkage of the tissue being treated.
- 36. The electrosurgical device according to claim 24, wherein the thermal energy provided by the heat delivery modality is minimized when the tissue being treated achieves a pre-determined shrinkage level.